



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-----------------------------|----------------|-----------------------|---------------------|-----------------|
| 09/941,558 | 08/30/2001 | Mamoru Shimoda | 2936-0134P | 6110 |
| 2292 7 | 590 10/05/2005 | | EXAMINER | |
| BIRCH STEV | WART KOLASCH & | VAN HANDEL, MICHAEL P | | |
| FALLS CHURCH, VA 22040-0747 | | | ART UNIT | PAPER NUMBER |
| | , | | 2617 | |

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|---|--|--|--|--|
| Office Asticus Occurrence | 09/941,558 | SHIMODA, MAMORU | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Michael Van Handel | 2617 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D. (35 U.S.C. § 133). | | | | |
| Status | | • | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| | action is non-final. | | | | | |
| 3) Since this application is in condition for allowar | | secution as to the merits is | | | | |
| closed in accordance with the practice under E | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-7</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-7</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | r | | | | | |
| 10) The drawing(s) filed on is/are: a) acce | | Examiner. | | | | |
| Applicant may not request that any objection to the | | | | | | |
| Replacement drawing sheet(s) including the correcti | on is required if the drawing(s) is obj | ected to. See 37 CFR 1.121(d). | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of: | priority under 35 U.S.C. § 119(a) | -(d) or (f). | | | | |
| 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. | | | | | | |
| | | | | | | 3. Copies of the certified copies of the prior |
| application from the International Bureau | | · | | | | |
| * See the attached detailed Office action for a list of | of the certified copies not receive | d. | | | | |
| | | · | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | te | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal P. 6) Other: | atent Application (PTO-152) | | | | |

Application/Control Number: 09/941,558 Page 2

Art Unit: 2617

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-4, 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Yonekura et al.

Referring to claim 1, Yonekura et al. discloses a radio-frequency receiver comprising:

- a mixer 17 for mixing a received radio-frequency signal with a local signal to convert the radio-frequency signal into an intermediate-frequency signal or baseband signal (col. 4, l. 8-17)(Fig. 2A);
- a local signal generator 19 (col. 4, l. 49-57)(Fig. 2A);
- a level switcher 37 for switching an output signal level of the local signal generator (col. 4, 1. 53-57); and
- a controller 79 for controlling the level switcher according to a frequency of the received signal (col. 6, l. 25-35).

Referring to claim 2, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 1, wherein the local signal generator comprises a voltage-controlled oscillator 53, 55 and a frequency multiplier circuit 37 for multiplying a frequency of an output signal of the voltage-controlled oscillator (col. 4, l. 66-67)(col. 5, l. 1-6).

Application/Control Number: 09/941,558 Page 3

Art Unit: 2617

Referring to claim 3, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 2, wherein the local signal generator includes a phase-locked loop circuit 35 for controlling an oscillation frequency of the voltage-controlled oscillator (col. 4, l. 49-65), and the controller controls the voltage-controlled oscillator through the phase-locked loop circuit by using a control signal, and also controls the level switcher by using another control signal corresponding to the control signal (col. 5, l. 42-45)(col. 6, l. 32-35).

Referring to claim 4, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 1, wherein the level switcher comprises a regulator 33 and a switch for varying an output voltage of the regulator, and varies a gain of the frequency multiplier circuit by using the output voltage of the regulator (col. 7, l. 20-40).

Referring to claim 6, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 1, wherein the local signal generator comprises a plurality of VCOs 53, 55 and a VCO switcher 63 for switching among the VCOs so that one of the VCOs is selected and connected to the frequency multiplier circuit at a time (col. 7, l. 18-40).

Referring to claim 7, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 6, wherein the controller controls both the level switcher and the VCO switcher according to the frequency of the received signal (col. 6, l. 32-35).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable in view of Yonekura et al. in view of Pugel.

Referring to claim 5, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 1. Yonekura et al. does not disclose that the radio-frequency receiver is for receiving digital satellite broadcast. Pugel discloses a digital satellite video signal receiver (col. 5, l. 33-41). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Yonekura et al. to receive digital satellite video signals such as that taught by Pugel in order to increase the amount of information that can be transmitted to the receiver and increase the number of users that can easily receive the information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571.272.5968. The examiner can normally be reached on Monday-Friday, 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571.272.7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2617

Michael Van Handel Examiner Art Unit 2617

MVH

CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600